

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP09019784 to NEC Corporation.

NEC describes (Abstract) a laser beam 20 for patterning amorphous film, describes an auto-focus laser beam 21, describe objective lens 6, and describe automatic adjustment of the focus.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP2000084688 to Toyota Motor Corp.

Toyota describes (Abstract) laser beam 10 and laser range finder 2, and describe detecting deviation of the focal position from a prescribed position.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP2001340979 to Toyota Auto Body.

Toyota describes (Abstract) laser irradiating equipment (30) for processing, pilot laser irradiating equipment (40 and 50), and detecting means (60) which is used to find and implement a teaching point.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP1338371A1 to Hamamatsu Photonics.

Hamamatsu Photonics describes (Abstract) laser beam machining with a condensed point, and show (e.g., Figure 67) laser light source, observation light source, lens selection mechanism, and processor and controller features.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP09019784 to NEC Corporation, JP2000084688 to Toyota Motor Corp, JP2001340979 to Toyota Auto Body, or EP1338371A1 to Hamamatsu Photonics as applied to claims 10-12 above, and further in view of USPN 6,992,026 to Fukuyo et al.

Fukuyo et al describe well known cutting by laser of semiconductor wafer or glass substrate and the use of first and second lasers for cutting and detection for producing a semiconductor device would have been obvious at the time applicant's

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invention was made to a person having ordinary skill in the art because production of semiconductor devices by laser cutting provides rapid production and little waste.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samuel M Heinrich/
Primary Examiner, Art Unit 3742